AMENDMENTS TO THE SPECIFICATION

Please add the following new header and new paragraph immediately following the title:

CROSS REFERENCE TO RELATED APPLICATIONS

This is divisional of co-pending U.S. Patent Application No. 09/744,754, filed January 24, 2001, which is a U.S. National Stage of International Application No. PCT/US99/15284, filed July 6, 1999, which was published in English under PCT Article 21(2), and which claims the benefit of U.S. Provisional Application No. 60/094,407, filed July 28, 1998. Each of the foregoing applications is incorporated herein in their entirely.

Please replace the paragraph beginning at page 1, lines 25-29 with the following rewritten paragraph:

Individual IFN-α subtypes have different biological activities. For instance, it was recognized early in interferon research that IFN-α1 and IFN-α2 have distinct target-cell specificities. Human IFN-α2 shows high specific activity on bovine and human cells (similar to most HuIFN-αs), whereas human IFN-α1 shows high activity only on bovine cells.

Please replace the paragraph beginning at page 6, lines 13-19 with the following rewritten paragraph:

Also encompassed are purified or isolated interferon-αs (such as IFN-α2cd) that contain point mutations at either residue 86 or residue 90, thereby changing these residues to tyrosine. Such mutant interferon-αs may be mutant hybrid molecules, and such mutant hybrids can contain short or long segments of IFN-α2c, IFN-α21a, or both of these parental interferons. Specific representatives of these mutant hybrid interferons include SDM-1 and SDM-2. Additional mutations can be made to replace existing tyrosine residues at 86 or 90 with other amino acids; specific representatives of this type of mutant hybrid interferon are SDM-3, and SDM-4.

Please replace the paragraph beginning at page 17, line 27 through page 18, line 3 with the following rewritten paragraph:

Using methods essentially similar to those discussed above for HY-1, -2, and -3, three further hybrid interferon molecules were constructed which incorporate shorter internal segments of the parent interferons. HY-4 was constructed using HY-2 as a template, and incorporates the following α-interferon sequences: IFN-α21a(1-75)/IFN-α2c(76-81)/IFN-α21a(82-95)/IFNF-α2c(96-166). The nucleotide sequence of HY-4 is depicted in SEQ ID NO: 29. Primers 14s and 14as (SEQ ID NO: 14 and 15) served as the inside primers for construction of this hybrid.

HY-5 was constructed using HY-2 as a template, and incorporates the following interferon sequences: IFN-α21a(1-75)/IFN-α21a(76-81)/IFN-α2c(82-95)/IFNF-α2c(96-166). The nucleotide sequence of HY-5 is depicted in SEQ ID NO: 31. Primers 15s and 15as (SEQ ID NO: 16 and 17) served as the inside primers for construction of this hybrid.

HY-6 was constructed using HY-1 and parental IFN-α21a as templates, and incorporates the following interferon sequences: IFN-α21a(1-75)/IFN-α2c(76-95)/IFNF-α21a(96-166).~~)~~. The nucleotide sequence of HY-6 is depicted in SEQ ID NO: 33. Primers M291s and M219as (SEQ ID NO: 18 and 19) served as the inside primers for construction of this hybrid. Primers 28* and 1 (SEQ ID NO: 28 and 1) served as the outside primers for production of all three of these hybrids.